14-2. Reduce chronic hepatitis B virus infections in infants and young children (perinatal infections).

National Data Sources	Perinatal Hepatitis B Prevention Program, CDC, NCHHSTP; National Vital Statistics System-Natality (NVSS-N), CDC, NCHS.
State Data Sources	State Perinatal Hepatitis B Prevention Programs; State Vital Statistics Systems.
Healthy People 2000 Objective	20.3f (Immunization and Infectious Diseases).
Changes since the 2000 Publication	None.
Measure	Number.
Baseline (Year)	1,682 (1995)
Target	400
Target-Setting Method	76 percent improvement. For a discussion of target-setting methods, see Part A, section 4.
Numerator	Number of estimated chronic hepatitis B virus (HBV) infections occurring among infants and children aged 1-24 months of HBV-infected mothers (see Comments).
Denominator	Not applicable.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Baseline Data	CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1.
Expected Periodicity	Annual.
Comments	Using data collected by the Perinatal Hepatitis B Prevention Program and NVSS-N, this measure is based on the following estimation procedure:[1, 2, 3, 4] (1) Multiply the total births per year to HBsAg-positive women by the proportion of pregnant women screened for HBsAg and then by the

proportion of infants born to identified HBsAg-positive women who receive the vaccine (this estimates the number of infants who were born to identified HBsAg-positive women and received at least one dose of vaccine).

(2) Multiply the total number of infants who were born to HBsAg-positive women and received at least one dose of vaccine by the proportion of vaccinated infants who will remain susceptible, and add to the number of infants born to HBsAg-positive women who are not vaccinated (this estimates the number of infants born to HBsAg-positive women who remain susceptible).

(3) Finally, multiply number of infants born to HBsAg- positive women remaining susceptible by the proportion of susceptible infants who will become infected and then by the proportion of infected infants who will remain chronically infected with HBV.

The estimated number of births to HBV-infected mothers is derived by applying race- and ethnicity-specific estimates of the prevalence of hepatitis B surface antigen to NVSS-N annual natality data.

This objective tracks the same measure as Healthy People 2000 objective 20.3f.

For some measures, data do not meet the criteria for statistical reliability, data quality, or confidentiality and have been suppressed. Information on suppression of data for the major Healthy People 2010 data systems has been published in a *Healthy People Statistical Note*.[5]

See Part C for a description of NVSS-N and Appendix A for focus area contact information.

References

1. Centers for Disease Control and Prevention (CDC). Case definitions for infectious conditions under public health surveillance. *Morbidity and Mortality Weekly Report* 46 (RR-10), 1997. (Updated case definitions can be found at: http://www.cdc.gov/epo/dphsi/casedef/).

2. Margolis, H.S.; Alter, M.J.; Hadler, S.C. Hepatitis B: Evolving epidemiology and implications for control. *Seminars in Liver Disease* 11(2): 84-92, 1991.

3. CDC. Hepatitis Surveillance Report (56). 1995.

4. Margolis, H.S.; Coleman, P.J.; Brown, R.E.; et al. Prevention of hepatitis B virus transmission by immunization: An economic analysis of current recommendations. *Journal of the American Medical Association* 274:1201-1208, 1995.

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